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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,603	03/24/2004	Guifang Zhu	yeh-pt002	7253
7590		05/12/2006	EXAMINER	
Kao H. Lu		BALSIS, SHAY L		
686 Lawson Ave.		ART UNIT		
Havertown, PA 19083		PAPER NUMBER		
		1744		

DATE MAILED: 05/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/809,603

Applicant(s)

ZHU, GUIFANG

Examiner

Shay L. Balsis

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5, 9-11 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Busha (USPN 6463620).

Busha teaches a brush assembly comprising a housing (12) and a connection mechanism (30) mounted in the housing. There is a bristle part (60) detachably mounted to the connection mechanism and a button (32) mounted to the housing by the connection mechanism for dismantling the bristle part.

With regards to claim 2, the housing comprises a recess with a through hole (22) formed therein. The connection mechanism includes a clicking ring (40) and a connection bolt (30).

With regards to claim 3, the bristle part comprises a column (50) to clip on the clicking ring.

With regards to claim 4, the clicking member has a round rail (edge of 40) and the column of the bristle part has a protrusion to clutch in the round rail (larger rounded portion of 56).

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With regards to claim 5, the bristle part further comprises a cavity for a foot section of the connection bolt (smaller rounded portion of 56).

With regards to claim 9, the connection mechanism further includes a supporting ring (not labeled in figure 3, but shown as block shaped element under the spring) located between a bottom of the recess and a head section of the bolt.

With regards to claim 10, the head section (upper portion of connection mechanism in figure 3) is larger than the body section to securely position the ring between the bottom of the recess and the head section.

With regards to claim 11, the connection mechanism further includes a cover shield on the bolt (34).

With regards to claim 13, the connection mechanism further comprises a spring (42).

Claims 1-5, 11-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Blackman et al. (PGPub 2004/0172778).

Blackman teaches a brush assembly comprising a housing (52) and a connection mechanism (55) mounted in the housing. There is a bristle part (54) detachably mounted to the connection mechanism and a button (56) mounted to the housing by the connection mechanism for dismantling the bristle part.

With regards to claim 2, the housing comprises a recess with a through hole (figure 9 shows through hole surrounding 55) formed therein. The connection mechanism includes a clicking ring (protruding part of 55) and a connection bolt (elongated portion of 55).

With regards to claim 3, the bristle part comprises a column (figure 8, best shown as 54) to clip on the clicking ring.

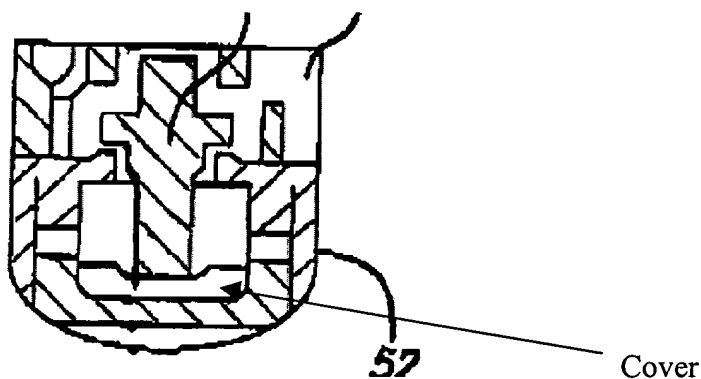
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With regards to claim 4, the clicking member has a round rail (the protruding portion is circular as shown by the side and top views of figures 8 and 9) and the column of the bristle part has a protrusion to clutch in the round rail (figure 8).

With regards to claim 5, the bristle part further comprises a cavity for a foot section of the connection bolt (59).

With regards to claim 11, the connection mechanism further includes a cover shield on the bolt (see figure below).

With regards to claim 12, there is a driving shaft (57) for vibrating the bristle part via the connection bolt.



Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Busha ('620) or Blackman et al. ('778).

Busha and Blackman teach all the essential elements of the claimed invention however fails to teach what shape the foot section of the connection bolt is and what shape the cavity in the bristle part is. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the shape of the connection bolt and corresponding cavity so that they are hexagonal since the configuration of the claimed bolt and cavity was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration of the claimed connection bolt and cavity was significant. *In re Dailey*, 149 USPQ 47. MPEP 2144.

Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blackman et al. ('778) in view of Busha ('620).

Blackman teaches all the essential elements of the claimed invention however fail to teach a spring located between the cover and the button. The button of Blackman must be biased however the reference does not disclose any details. Busha teaches a spring-loaded button for releasing a brush head. It would have been obvious to modify the button of Blackman with a spring loaded button as taught by Busha since the spring will cause the button to return it is original position after being depressed ([0021]). Thus the button will be ready for the next time it must be depressed to remove a brush head.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shay L. Balsis whose telephone number is 571-272-1268. The examiner can normally be reached on 7:30-5:00 M-Th, alternating F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on 571-272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Slb
5/8/06



GLADYS SP CORCORAN
SUPERVISOR, PATENT EXAMINER